

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appeal No. _____

Application No.: 10/588,404
Conf. No.: 6947
Filing Date: August 3, 2006
Appellants: Masaki Kitahara et al.
Group Art Unit: 2482
Examiner: Hee-Yong Kim
Title: Video Encoding Method and Apparatus, Video
Decoding Method and Apparatus, Programs Therefor,
and Storage Media for Storing the Programs
Attorney Docket: 5259-000070/US/NP

RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF

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Sir:

In response to the Notification of Non-Compliant Appeal Brief mailed February 10, 2012, Applicant submits a corrected Summary of the Claimed Subject Matter mapping all independent claims to the original filed specification by page and line number. This Summary of the Claimed Subject Matter is intended to completely replace the equivalent section included in the Appeal Brief filed February 6, 2012.

SUMMARY OF THE CLAIMED SUBJECT MATTER**Concise Explanation of Independent Claim 1**

Independent claim 1 recites a video encoding method that assigns a plurality of images [A, B, C in Figs. 1 and 5] to a plurality of GOPs [Fig. 1, Fig. 5] which correspond to different viewing positions or directions, and encodes images belonging to the GOPs as a video image, the method comprising:

a GOP encoding determination step in which:

if it is determined that each image belonging to a given GOP can be generated on a decoding side without using encoded data of a relevant image, it is determined that the relevant image is not encoded and no encoded data thereof is output; [see Fig. 2, dotted boxed switch preceding box 114, controlled by box 117] [see page 14, line 21 to page 15, line 8 of the specification as filed] and

if it is determined that each image belonging to the given GOP cannot be generated on a decoding side unless encoded data of the relevant image is used, then it is determined that the relevant image is encoded and the encoded data thereof is output; [see Fig. 2, dotted boxed switch preceding box 114, controlled by box 117] [see page 14, line 21 to page 15, line 8 of the specification as filed]

a GOP encoding/non-encoding data encoding step [see box 118 of Fig. 2] of encoding GOP encoding/non-encoding data for indicating whether the encoded data of the image belonging to the given GOP is output; and

an in-GOP image encoding step [see box 110 of Fig. 2], of encoding the image belonging to the given GOP when the encoded data of the image is output, wherein:

when a subject is included in said images belonging to the GOPs and it is determined that the relevant image of the given GOP is not encoded, image data of the subject having a viewing position or direction which corresponds to the given GOP is generated using data of the images belonging to the GOPs other than the given GOP. [see page 21, lines 6-10 of the specification as filed: "when no encoded data is output from the in-GOP image encoding part 110, the decoded image storage memory 112 deletes the decoded images at times T1 and T2, and stores images corresponding to the encoding data of the GOP which is determined by the GOP encoding determination part 117, among the images generated by the image generation part 114 (i.e., images generated by the selected image generation method)"]

Concise Explanation of Independent Claim 5

Independent claim 5 recites a video decoding method that decodes encoded data generated by assigning a plurality of images [A, B, C in Figs. 1 and 5] to a plurality of GOPs [Fig. 1, Fig. 5] which correspond to different viewing positions or directions, and encoding images belonging to the GOPs as a video image, the method comprising:

a GOP encoding/non-encoding data decoding step of decoding GOP encoding/non-encoding data for indicating whether the encoded data of each image belonging to a given GOP is to be decoded; and [see Fig. 3, dotted boxed switch preceding box 209, controlled by box 210] [see page 25, lines 5-11 of the specification as filed]

an in-GOP image decoding step in which:

if the GOP encoding/non-encoding data indicates that the encoded data of a relevant image is to be decoded, the relevant image is decoded by decoding the encoded data; and [see Fig. 3, boxes 208, 209; see page 25, lines 12-21 of the specification as filed]

if the GOP encoding/non-encoding data indicates that the encoded data of the relevant image is not to be decoded, the relevant image is decoded by using an image generation method which does not use the encoded data of this image, wherein: [see Fig. 3, box 205; see page 25, lines 8-11 of the specification as filed]

when a subject is included in said images belonging to the GOPs and the GOP encoding/non-encoding data indicates that the encoded data of the relevant image is not to be decoded, image data of the subject having a viewing position or direction which corresponds to the given GOP is generated using data of the images belonging to the GOPs other than the given GOP. [see page 21, lines 6-10 of the specification as filed, discussed above in connection with claim 1]

Concise Explanation of Independent Claim 8

Independent claim 8 recites a video encoding apparatus that assigns a plurality of images [A, B, C in Figs 1 and 5] to a plurality of GOPs [Fig 1, Fig. 5] which correspond to different viewing positions or directions, and encodes images belonging to the GOPs as a video image, the apparatus comprising:

a GOP encoding determination part in which:

if it is determined that each image belonging to a given GOP can be generated on a decoding side without using encoded data of a relevant image, the GOP encoding determination part determines that the relevant image is not encoded and no encoded data thereof is output; and [see Fig. 2, dotted boxed switch preceding box 114, controlled by box 117] [see page 14, line 21 to page 15, line 8 of the specification as filed]

if it is determined that each image belonging to the given GOP cannot be generated on a decoding side unless encoded data of the relevant image is used, then the GOP encoding determination part determines that the relevant image is encoded and the encoded data thereof is output; [see Fig. 2, dotted boxed switch preceding box 114, controlled by box 117] [see page 14, line 21 to page 15, line 8 of the specification as filed]

a GOP encoding/non-encoding data encoding part [see box 118 of Fig. 2] for encoding GOP encoding/non-encoding data for indicating whether the encoded data of the image belonging to the given GOP is output; and

an in-GOP image encoding part [see box 110 of Fig. 2] for encoding the image belonging to the given GOP when the encoded data of the image is output, wherein:

when a subject is included in said images belonging to the GOPs and the GOP encoding determination part determines that the relevant image of the given GOP is not encoded, image data of the subject having a viewing position or direction which corresponds to the given GOP is generated using data of the images belonging to the GOPs other than the given GOP. [see page 21, lines 6-10 of the specification as filed, discussed above in connection with claim 1]

Concise Explanation of Independent Claim 12

Independent claim 12 recites a video decoding apparatus that decodes encoded data generated by assigning a plurality of images [A, B, C in Figs 1 and 5] to a plurality of GOPs [Fig. 1, Fig. 5] which correspond to different viewing positions or directions, and encoding images belonging to the GOPs as a video image, the apparatus comprising:

a GOP encoding/non-encoding data decoding part for decoding GOP encoding/non-encoding data for indicating whether the encoded data of each image belonging to a given GOP is to be decoded; and [see Fig. 3, dotted boxed switch preceding box 209, controlled by box 210] [see page 25, lines 5-11 of the specification as filed]

an in-GOP image decoding part in which:

if the GOP encoding/non-encoding data indicates that the encoded data of a relevant image is to be decoded, the in-GOP image decoding part decodes the relevant image by decoding the encoded data; and [see Fig. 3, boxes 208, 209; see page 25, lines 12-21 of the specification as filed]

if the GOP encoding/non-encoding data indicates that the encoded data of the relevant image is not to be decoded, the in-GOP image decoding part decodes the relevant image by using an image generation method which does not use the encoded data of this image, wherein: [see Fig. 3, box 205; see page 25, lines 8-11 of the specification as filed]

when a subject is included in said images belonging to the GOPs and the GOP encoding/non-encoding data indicates that the encoded data of the relevant image is

not to be decoded, image data of the subject having a viewing position or direction which corresponds to the given GOP is generated using data of the images belonging to the GOPs other than the given GOP. [see page 21, lines 6-10 of the specification as filed, discussed above in connection with claim 1]

Respectfully submitted,

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Dated: March 8, 2012

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